OM protein - nucleic search, using frame_plus_p2n model

Run on: January 16, 2003, 16:58:32 ; Search time 1455.46 Seconds
(without alignments)
122.402 Million cell updates/sec

Title: US-09-856-070-23
Perfect score: 55
Sequence: 1 ELMLPIQDYEE 11

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
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-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
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-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : EST:*
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2: em_esthum:*
3: em_estin:*
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15: em_estfun:*
16: em_estom:*
17: gb_gss:*
18: em_gss_hum:*
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20: em_gss_pln:*
21: em_gss_vrt:*
22: em_gss_fun:*
23: em_gss_mam:*
24: em_gss_mus:*
25: em_gss_other:*
26: em_gss_pro:*
27: em_gss_rod:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
1		55	100.0	192	10	AW862068	AW862068 RC3-CT034
2		55	100.0	214	13	BI052878	BI052878 RC5-GN028
3		55	100.0	214	13	BI054475	BI054475 RC5-GN028
4	c	55	100.0	215	14	BQ367833	BQ367833 RC5-GN028
5		55	100.0	234	12	BG754562	BG754562 602710194
6		55	100.0	275	14	BM844124	BM844124 K-EST0122
7		55	100.0	279	12	BF804323	BF804323 QV4-CI015
8		55	100.0	281	10	AW845219	AW845219 CM0-CT001
9	c	55	100.0	294	13	BI050028	BI050028 CM2-GN029
10		55	100.0	297	12	BF869430	BF869430 QV0-ET014
11		55	100.0	312	14	BM827086	BM827086 K-EST0099
12		55	100.0	358	14	BQ323837	BQ323837 CM0-CI009
13		55	100.0	364	14	BQ368118	BQ368118 PM3-GN051
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17		55	100.0	447	10	AW997331	AW997331 RC2-BN004
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19		55	100.0	460	14	BM846053	BM846053 K-EST0124
20		55	100.0	469	9	AI834242	AI834242 RC0-HT001
21		55	100.0	481	13	BI056715	BI056715 RC5-GN028
22		55	100.0	482	14	BQ367835	BQ367835 RC5-GN028
23		55	100.0	484	10	AW845215	AW845215 CM0-CT001
24		55	100.0	484	10	BE314916	BE314916 601140093
25		55	100.0	484	14	BM834208	BM834208 K-EST0109
26		55	100.0	486	13	BI056723	BI056723 RC5-GN028
27		55	100.0	496	14	BM785233	BM785233 K-EST0063
28		55	100.0	507	14	BM820606	BM820606 K-EST0089
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30		55	100.0	540	14	BM786594	BM786594 K-EST0065
31		55	100.0	541	14	BM761268	BM761268 K-EST0042
32		55	100.0	553	14	BM762912	BM762912 K-EST0044
33	c	55	100.0	559	13	BI056711	BI056711 RC5-GN028
34		55	100.0	564	12	BG746504	BG746504 602703802
35		55	100.0	572	14	BM744665	BM744665 K-EST0018
36		55	100.0	574	10	BE295933	BE295933 601174209
37		55	100.0	583	14	BM783500	BM783500 K-EST0061
38		55	100.0	590	14	BM783604	BM783604 K-EST0061
39		55	100.0	592	14	BM740878	BM740878 K-EST0013
40		55	100.0	593	14	BM838153	BM838153 K-EST0114
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44		55	100.0	632	14	BM767345	BM767345 K-EST0049
45		55	100.0	633	10	AW993854	AW993854 RC3-BN003

ALIGNMENTS

RESULT 1
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LOCUS AW862068 192 bp mRNA linear EST 19-MAY-2000
DEFINITION RC3-CT0347-210400-018-d10 CT0347 Homo sapiens cDNA, mRNA sequence.
ACCESSION AW862068
VERSION AW862068.1 GI:7957761
KEYWORDS EST.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 192)
AUTHORS Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,

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            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=&t2=RC3-CT0347-210
            400-016-d10&t3=2000-04-21&t4=1)
            Seq primer: puc 18 forward
            High quality sequence stop: 192.
FEATURES             Location/Qualifiers
     source          1..192
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CT0347"
                     /dev_stage="Adult"
                     /note="Organ: colon; Vector: puc18; Site_1: SmaI; Site_2:
                     SmaI; A mini-library was made by cloning products derived
                     from ORESTES PCR (U.S. Letters Patent application No. 196
                     ,716 - Ludwig Institute for Cancer Research) profiles
                     into the pUC 18 vector. Reverse transcription of tissue
                     mRNA and cDNA amplification were performed under low
                     stringency conditions."
BASE COUNT       65 a      34 c      71 g      22 t
ORIGIN

Alignment Scores:
Pred. No.:                0.0846          Length:          192
Score:                    55.00           Matches:         11
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Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       10              Gaps:            0

US-09-856-070-23 (1-11) x AW862068 (1-192)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
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Db     106 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 138

RESULT 2
BI052878
LOCUS       BI052878                 214 bp    mRNA    linear   EST 15-JUN-2001
DEFINITION  RC5-CN0281-230101-021-F02-CN0281 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BI052878
VERSION     BI052878.1  GI:14460408
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 214)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=RC5&t2=RC5-CN0281
            230101-021-F02&t3=2001-01-23&t4=1)
            Seq primer: puc 18 forward
            High quality sequence stop: 214.
FEATURES             Location/Qualifiers
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                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CN0281"
                     /dev_stage="Adult"
                     /note="Organ: placenta_normal; Vector: puc18; Site_1: SmaI
                     ; Site_2: SmaI; A mini-library was made by cloning
                     products derived from ORESTES PCR (U.S. Letters Patent
                     application No. 196,716 - Ludwig Institute for Cancer
                     Research) profiles into the pUC 18 vector. Reverse
                     transcription of tissue mRNA and cDNA amplification were
                     performed under low stringency conditions."
BASE COUNT       67 a      36 c      88 g      23 t
ORIGIN

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Pred. No.:                0.0989          Length:          214
Score:                    55.00           Matches:         11
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       13              Gaps:            0

US-09-856-070-23 (1-11) x BI052878 (1-214)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
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Db      59 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 91

RESULT 3
BI054475
LOCUS       BI054475                 214 bp    mRNA    linear   EST 15-JUN-2001
DEFINITION  RC5-CN0281-010201-012-H01 CN0281 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BI054475
VERSION     BI054475.1  GI:14462005
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 214)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
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            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/getHtml2.pl?1 RC5&T2=RC5-GN0281-
            010201-012-H01&T3-2001-02-01&T4-1)
            Seq primer: puc 18 forward
            High quality sequence stop: 214.
FEATURES              Location/Qualifiers
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                      /organism="Homo sapiens"
                      /db_xref="taxon:9606"
                      /clone_lib="GN0281"
                      /dev_stage="Adult"
                      /note="Organ: placenta_normal; Vector: puc18; Site_1: SmaI
                      ; Site_2: SmaI; A mini-library was made by cloning
                      products derived from ORESTES PCR (U.S. Letters Patent
                      application No. 196,716 - Ludwig Institute for Cancer
                      Research) profiles into the pUC 18 vector. Reverse
                      transcription of tissue mRNA and cDNA amplification were
                      performed under low stringency conditions."
BASE COUNT       68 a      36 c      88 g      22 t
ORIGIN

Alignment Scores:
Pred. No.:                0.0989          Length:          214
Score:                    55.00           Matches:         11
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       13              Gaps:            0

US-09-856-070-23 (1-11) x BI054475 (1-214)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
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Db     59 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 91

RESULT 4
BQ367833/c
LOCUS       BQ367833                 215 bp    mRNA    linear   EST 21-MAY-2002
DEFINITION  RC5-GN0281-150201-013-A09 GN0281 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BQ367833
VERSION     BQ367833.1  GI:21043334
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
            Mammalia, Eutheria, Primates, Catarrhini, Hominidae; Homo.
REFERENCE   1  (bases 1 to 215)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/getHtml2.pl?1 RC5&T2=RC5-GN0281-
            150201-013-A09&T3-2001-02-15&T4-1)
            Seq primer: puc 18 forward.
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                      /clone_lib="GN0281"
                      /dev_stage="Adult"
                      /note="Organ: placenta_normal; Vector: puc18; Site_1: SmaI
                      ; Site_2: SmaI; A mini-library was made by cloning
                      products derived from ORESTES PCR (U.S. Letters Patent
                      application No. 196,716 - Ludwig Institute for Cancer
                      Research) profiles into the pUC 18 vector. Reverse
                      transcription of tissue mRNA and cDNA amplification were
                      performed under low stringency conditions."
BASE COUNT       22 a      91 c      34 g      68 t
ORIGIN

Alignment Scores:
Pred. No.:                0.0995          Length:          215
Score:                    55.00           Matches:         11
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       14              Gaps:            0

US-09-856-070-23 (1-11) x BQ367833 (1-215)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
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Db     157 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 125

RESULT 5
BG754562
LOCUS       BG754562                 234 bp    mRNA    linear   EST 15-MAY-2001
DEFINITION  602710194F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4846630 5',
            mRNA sequence.
ACCESSION   BG754562
VERSION     BG754562.1  GI:14065215
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
            Mammalia, Eutheria, Primates, Catarrhini, Hominidae; Homo.
REFERENCE   1  (bases 1 to 234)
  AUTHORS   NIH-MGC http://mgc.nci.nih.gov/.
  TITLE     National Institutes of Health, Mammalian Gene Collection (MGC)
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Robert Strausberg, Ph.D.
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
            cDNA Library Preparation: Ling Hong/Kubin Laboratory
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Incyte Genomics, Inc.
            Clone distribution: MGC clone distribution information can be
            found through the I.M.A.G.E. Consortium/LLNL at:
            http://image.llnl.gov
            Plate: LLCM1687  row: l  column: 23
            High quality sequence stop: 234.
FEATURES              Location/Qualifiers
     source           1..234
                      /organism="Homo sapiens"
                      /db_xref="taxon:9606"
                      /clone="IMAGE:4846630"
                      /clone_lib="NIH_MGC_48"
                      /tissue_type="primary B-cells from tonsils (cell line)"
                      /lab_host="DH10B (phage-resistant)"
                      /note="Organ: B-cells; Vector: pOTR7; Site_1: XhoI;
                      Site_2: EcoRI; cDNA made by oligo-dT priming.
                      Directionally cloned into EcoRI/XhoI sites using the
                      following 5' adaptor: GGCACGAG(G). Size-selected >500bp
                      for average insert size 1.8kb. Library constructed by Ling
                      Hong in the laboratory of Gerald M. Rubin (University of
                      California, Berkeley) using  ZAP cDNA Synthesis kit
                      (Stratagene) and Superscript II RT (Life Technologies).
                      Note: this is a NIH_MGC Library."
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BASE COUNT       81 a      38 c      96 g      19 t
ORIGIN

Alignment Scores:
Pred. No.:                0.112          Length:          234
Score:                    55.00          Matches:         11
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       12             Gaps:            0

US-09-856-070-23 (1-11) x BG754562 (1-234)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
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Db     106 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 138

RESULT 6
BM844124
LOCUS       BM844124                 275 bp    mRNA    linear   EST 06-MAR-2002
DEFINITION  K-EST0122163 S13KMS5 Homo sapiens cDNA clone S13KMS5-38-G03 5',
            mRNA sequence.
ACCESSION   BM844124
VERSION     BM844124.1  GI:19200533
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
REFERENCE   1  (bases 1 to 275)
  AUTHORS   Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
            Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
            Kim,Y.S.
  TITLE     21C Frontier Korean EST Project 2001
  JOURNAL   Unpublished (2002)
COMMENT     Contact: Kim YS
            Genome Research Center
            Korea Research Institute of Bioscience & Biotechnology
            52 Eocun-dong Yuseong-gu, Daejeon 305-333, South Korea
            Tel: 82-42-860-4470
            Fax: 82-42-860-4409
            Email: yongsung@mail.kribb.re.kr
            Plate: 38  row: G  column: 03
            High quality sequence stop: 275.
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:9606"
                     /clone="S13KMS5-38-G03"
                     /clone_lib="S13KMS5"
                     /tissue_type="myeloma"
                     /cell_line="KMS-5"
                     /lab_host="Top10F'"
                     /note="Vector: pCNS; Site_1: EcoRI; Site_2: NotI; The poly
                     (A)+ RNA was dephosphorylated with bacterial alkaline
                     phosphatase (BAP) and then decapped with tabacco acid
                     pyrophosphatase (TAP). The decapped intact mRNA was
                     ligated with DNA-RNA linker including EcoR I site by
                     treatment of T4 RNA ligase and the first strand cDNA was
                     synthesized from oligo dT-selected mRNA by priming with
                     dT-tailed vector. The dT-tailed vector was adjusted to
                     have about 60nt. The cDNA vector was circularized with E.
                     coli DNA ligase after digestion of EcoRI which site is
                     also included in vector. An RNA strand converted to a DNA
                     strand by Okayama Berg method. The obtained cDNA vectors
                     were used for transformation of competent cells E. coli
                     Top10F' by electroporation method. The cDNA libraries
                     constructed by this method are full-length enriched cDNA
                     library."
BASE COUNT       81 a      48 c     117 g      29 t
ORIGIN

Alignment Scores:
Pred. No.:                0.142          Length:          275
Score:                    55.00          Matches:         11
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       14             Gaps:            0

US-09-856-070-23 (1-11) x BM844124 (1-275)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
           ||||||||||||||||||||||||||||||||||
Db      51 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 83

RESULT 7
BF804323
LOCUS       BF804323                 279 bp    mRNA    linear   EST 12-JAN-2001
DEFINITION  QV4-C10151-031100-513-f05 C10151 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BF804323
VERSION     BF804323.1  GI:12133312
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 279)
  AUTHORS   Dias Neto,E., Garcia Correa,P., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=QV4&t2=QV4-C10151-
            031100-513-f05&t3=2000-11-03&t4=1)
            Seq primer: puc 18 forward
            High quality sequence stop: 279.
FEATURES             Location/Qualifiers
     source          1..279
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CI0151"
                     /dev_stage="Adult"
                     /note="Organ: colon_ins; Vector: puc18; Site_1: SmaI;
                     Site_2: SmaI; A mini-library was made by cloning products
                     derived from  ORESTES PCR (U.S. Letters Patent application
                     No. 196,716 -  Ludwig Institute for Cancer Research)
                     profiles into  the pUC 18 vector. Reverse transcription of
                     tissue mRNA and cDNA amplification were performed under
                     low stringency conditions."
BASE COUNT       88 a      53 c     111 g      27 t
ORIGIN

Alignment Scores:
Pred. No.:                0.145          Length:          279
Score:                    55.00          Matches:         11
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       12             Gaps:            0
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US-09-856-070-23 (1-11) x BF804323 (1-279)

Qy      1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
          ||||||||||||||||||||||||||||||||||
Db    124 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 156

RESULT 8
AW845219
LOCUS       AW845219                  281 bp    mRNA    linear   EST 19 MAY 2000
DEFINITION  CM0-CT0012 290699 017 a05 CT0012 Homo sapiens cDNA, mRNA sequence.
ACCESSION   AW845219
VERSION     AW845219.1  GI:7940736
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 281)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=&t2=CM0-CT0012-290
            699-017-a05&t3=1999-06-29&t4=1)
            Seq primer: puc 18 forward
            High quality sequence start: 10
            High quality sequence stop: 280.
FEATURES             Location/Qualifiers
     source          1. .281
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CT0012"
                     /dev_stage="Adult"
                     /note="Organ: colon; Vector: puc18; Site_1: SmaI; Site_2:
                     SmaI; A mini-library was made by cloning products derived
                     from  ORESTES PCR (U.S. Letters Patent application No. 196
                     ,716 -  Ludwig Institute for Cancer Research) profiles
                     into  the pUC 18 vector. Reverse transcription of tissue
                     mRNA and cDNA amplification were performed under low
                     stringency conditions."
BASE COUNT       94 a     52 c    105 g     30 t
ORIGIN

Alignment Scores:
Pred. No.:              0.146          Length:         281
Score:                  55.00          Matches:        11
Percent Similarity:     100.00%        Conservative:   0
Best Local Similarity:  100.00%        Mismatches:     0
Query Match:            100.00%        Indels:         0
DB:                     10             Gaps:           0

US-09-856-070-23 (1-11) x AW845219 (1-281)

Qy      1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
          ||||||||||||||||||||||||||||||||||
Db    179 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 211

RESULT 9
BI050028/c
LOCUS       BI050028                  294 bp    mRNA    linear   EST 15 JUN 2001
DEFINITION  CM2-CN0294-020101-676-c08 CN0294 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BI050028
VERSION     BI050028.1  GI:14457558
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 294)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=CM2&t2=CM2-CN0294-
            020101-676-c08&t3=2001-01-02&t4=1)
            Seq primer: puc 18 forward
            High quality sequence start: 17
            High quality sequence stop: 294.
FEATURES             Location/Qualifiers
     source          1. .294
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CN0294"
                     /dev_stage="Adult"
                     /note="Organ: placenta_normal; Vector: puc18; Site_1: SmaI
                     ; Site_2: SmaI; A mini-library was made by cloning
                     products derived from  ORESTES PCR (U.S. Letters Patent
                     application No. 196,716 -  Ludwig Institute for Cancer
                     Research) profiles into  the pUC 18 vector. Reverse
                     transcription of tissue mRNA and cDNA amplification were
                     performed under low stringency conditions."
BASE COUNT       34 a    114 c     56 g     90 t
ORIGIN

Alignment Scores:
Pred. No.:              0.156          Length:         294
Score:                  55.00          Matches:        11
Percent Similarity:     100.00%        Conservative:   0
Best Local Similarity:  100.00%        Mismatches:     0
Query Match:            100.00%        Indels:         0
DB:                     13             Gaps:           0

US-09-856-070-23 (1-11) x BI050028 (1-294)

Qy      1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
          ||||||||||||||||||||||||||||||||||
Db    210 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 178

RESULT 10
BF869430
LOCUS       BF869430                  297 bp    mRNA    linear   EST 17-JAN-2001
DEFINITION  QV0-ET0148-231000-456-d07 ET0148 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BF869430
VERSION     BF869430.1  GI:12259560
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KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
REFERENCE   1  (bases 1 to 297)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55 11 2707081
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/getshtml2.pl?1 QV0&12 QV0-ET0148-
            231000-456-d07&13-2000-10-23&14 1)
            Seq primer: puc 18 forward
            High quality sequence stop: 297.
FEATURES             Location/Qualifiers
     source          1..297
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="ET0148"
                     /dev_stage="Adult"
                     /note="Organ: lung_tumor; Vector: puc18; Site_1: SmaI;
                     Site_2: SmaI; A mini library was made by cloning products
                     derived from  ORESTES PCR (U.S. Letters Patent application
                     No. 196,716 -  Ludwig Institute for Cancer Research)
                     profiles into  the pUC 18 vector. Reverse transcription of
                     tissue mRNA and cDNA amplification were performed under
                     low stringency conditions."
BASE COUNT       90 a     56 c    119 g     31 t      1 others
ORIGIN

Alignment Scores:
Pred. No.:                0.158          Length:         297
Score:                    55.00          Matches:        11
Percent Similarity:       100.00%        Conservative:   0
Best Local Similarity:    100.00%        Mismatches:     0
Query Match:              100.00%        Indels:         0
DB:                       12             Gaps:           0

US-09-856-070-23 (1-11) x BF869430 (1-297)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
           ||||||||||||||||||||||||||||||||||
Db     124 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 156

RESULT 11
BM827086
LOCUS       BM827086                 312 bp    mRNA    linear   EST 06-MAR-2002
DEFINITION  K-EST0096421 S9SNU601 Homo sapiens cDNA clone S9SNU601-44-G09 5',
            mRNA sequence.
ACCESSION   BM827086
VERSION     BM827086.1  GI:19183495
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
REFERENCE   1  (bases 1 to 312)
  AUTHORS   Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
            Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
            Kim,Y.S.
  TITLE     21C Frontier Korean EST Project 2001
  JOURNAL   Unpublished (2002)
COMMENT     Contact: Kim YS
            Genome Research Center
            Korea Research Institute of Bioscience & Biotechnology
            52 Eoeun-dong Yuseong-gu, Daejeon 305-333, South Korea
            Tel: +82-42-860-4470
            Fax: +82-42-860-4409
            Email: yongsung@mail.kribb.re.kr
            Plate: 44  row: G  column: 09
            High quality sequence stop: 312.
FEATURES             Location/Qualifiers
     source          1..312
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="S9SNU601-44-G09"
                     /clone_lib="S9SNU601"
                     /sex="M"
                     /tissue_type="Ascites"
                     /cell_type="Epithelial"
                     /cell_line="SNU-601"
                     /lab_host="Top10F'"
                     /note="Organ: Stomach; Vector: pMEI8-FL3; Site_1: XhoI;
                     Site_2: XhoI; The poly (A)+ RNA was dephosphorylated with
                     bacterial alkaline phosphatase (BAP) and then decapped
                     with tabacco acid pyrophosphatase (TAP). The decapped
                     intact mRNA was ligated with DNA-RNA linker including SfiI
                     site by treatment of T4 RNA ligase and the first strand
                     cDNA was synthesized with Superscript II using SfiI
                     oligo-dT primer. After first strand synthesis, RNA was
                     degraded by NaOH treatment and cDNA was amplified by PCR
                     reaction. The PCR products were digested with SfiI and
                     cloned into DraIII- digested pMEI8S-FL3 vector. The
                     obtained cDNA vectors were used for transformation of
                     competent cells E. coli Top10F' by electroporation method.
                     The cDNA libraries constructed by this method are
                     full-length enriched cDNA library."
BASE COUNT      108 a     60 c    110 g     34 t
ORIGIN

Alignment Scores:
Pred. No.:                0.17           Length:         312
Score:                    55.00          Matches:        11
Percent Similarity:       100.00%        Conservative:   0
Best Local Similarity:    100.00%        Mismatches:     0
Query Match:              100.00%        Indels:         0
DB:                       14             Gaps:           0

US-09-856-070-23 (1-11) x BM827086 (1-312)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
           ||||||||||||||||||||||||||||||||||
Db     218 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 250

RESULT 12
BQ323837
LOCUS       BQ323837                 358 bp    mRNA    linear   EST 17-MAY 2002
DEFINITION  CM0-C10095-301000-648-b05 C10095 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BQ323837
VERSION     BQ323837.1  GI:20935634
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 358)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
```

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            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/qethtml2.pl?LL CM0&t2=CM0-C10095-
            301000-648-b05&t3-2000-10-30&t4-1)
            Seq primer: puc 18 forward
            High quality sequence stop: 2.
FEATURES             Location/Qualifiers
     source          1..358
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="C10095"
                     /dev_stage="Adult"
                     /note="Organ: colon_ins, Vector: puc18; Site_1: SmaI
                     Site_2: SmaI; A mini-library was made by cloning products
                     derived from ORESTES PCR (U.S. Letters Patent application
                     No. 196,716 - Ludwig Institute for Cancer Research)
                     profiles into the pUC 18 vector. Reverse transcription of
                     tissue mRNA and cDNA amplification were performed under
                     low stringency conditions."
BASE COUNT      112 a      74 c     130 g      42 t
ORIGIN

Alignment Scores:
Pred. No.:                0.207          Length:          358
Score:                    55.00          Matches:         11
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       14             Gaps:            0

US-09-856-070-23 (1-11) x BQ323837 (1-358)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
           ||||||||||||||||||||||||||||||||||
Db     231 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 263

RESULT 13
BQ368118
LOCUS       BQ368118                 364 bp    mRNA    linear   EST 21-MAY-2002
DEFINITION  PM3-GN0516-090501-010-d10 GN0516 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BQ368118
VERSION     BQ368118.1  GI:21943632
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 364)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/qethtml2.pl?LL=PM3&t2=PM3-GN0516-
            090501-010-d10&t3-2001-05-09&t4=1)
            Seq primer: puc 18 forward
            High quality sequence start: 11
            High quality sequence stop: 348.
FEATURES             Location/Qualifiers
     source          1..364
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="GN0516"
                     /dev_stage "Adult"
                     /note="Organ: placenta_normal, Vector: puc18; Site_1: SmaI
                     ; Site_2: SmaI; A mini-library was made by cloning
                     products derived from ORESTES PCR (U.S. Letters Patent
                     application No. 196,716 - Ludwig Institute for Cancer
                     Research) profiles into the pUC 18 vector. Reverse
                     transcription of tissue mRNA and cDNA amplification were
                     performed under low stringency conditions."
BASE COUNT      112 a      64 c     146 g      42 t
ORIGIN

Alignment Scores:
Pred. No.:                0.212          Length:          364
Score:                    55.00          Matches:         11
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       14             Gaps:            0

US-09-856-070-23 (1-11) x BQ368118 (1-364)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
           ||||||||||||||||||||||||||||||||||
Db     125 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 157

RESULT 14
BQ318340/c
LOCUS       BQ318340                 401 bp    mRNA    linear   EST 17-MAY-2002
DEFINITION  MR1-CT0529-140900-002-a12 CT0529 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BQ318340
VERSION     BQ318340.1  GI:20924109
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 401)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
```

```
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?t1=MR1&t2=MR1-CT0529-
            140900-002-a12&t4=2000-09-14&t4=1)
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                     /dev_stage="Adult"
                     /note="Organ: colon; Vector: puc18; Site_1: SmaI; Site_2:
                     SmaI; A mini-library was made by cloning products derived
                     from  ORESIES PCR (U.S. Letters Patent application No. 196
                     ,716 -  Ludwig Institute for Cancer Research) profiles
                     into  the pUC 18 vector. Reverse transcription of tissue
                     mRNA and cDNA amplification were performed under low
                     stringency conditions."
BASE COUNT       56 a    144 c     73 g    128 t
ORIGIN

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Query Match:              100.00%        Indels:         0
DB:                       14             Gaps:           0

US-09-856-070-23 (1-11) x BQ318340 (1-401)

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Db     249 GAGTTGATGCTGCGGCTGCAGGACTATGAGGAG 217

RESULT 15
BM744771
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DEFINITION  K-EST0018496 S4SNU1 Homo sapiens cDNA clone S4SNU1-18-D12 5', mRNA
            sequence.
ACCESSION   BM744771
VERSION     BM744771.1  GI:19066100
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 404)
  AUTHORS   Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
            Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
            Kim,Y.S.
  TITLE     21C Frontier Korean EST Project 2001
  JOURNAL   Unpublished (2002)
COMMENT     Contact: Kim YS
            Genome Research Center
            Korea Research Institute of Bioscience & Biotechnology
            52 Eoeun-dong Yuseong-gu, Daejeon 305-333, South Korea
            Tel: +82-42-860-4470
            Fax: +82-42-860-4409
            Email: yongsung@mail.kribb.re.kr
            Plate: 18  row: D  column: 12
            High quality sequence stop: 404.
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                     /cell_type="Lymphoblast-like"
                     /cell_line="SNU-1"
                     /lab_host="Top10F'"
                     /note="Organ: Stomach; Vector: pBS18RPI; Site_1: EcoRI;
                     Site_2: NotI; The poly (A)+ RNA was dephosphorylated with
                     bacterial alkaline phosphatase (BAP) and then decapped
                     with tabacco acid pyrophosphatase (TAP). The decapped
                     intact mRNA was ligated with DNA-RNA linker including EcoR
                     I site by treatment of T4 RNA ligase and the first strand
                     cDNA was synthesized from oligo dT-selected mRNA by
                     priming with dT-tailed vector. The dT-tailed vector was
                     adjusted to have about 60nt. The cDNA vector was
                     circularized with E. coli DNA ligase after digestion of
                     EcoRI which site is also included in vector. An RNA strand
                     converted to a DNA strand by Okayama-Berg method. The
                     obtained cDNA vectors were used for transformation of
                     competent cells E. coli Top10F' by electroporation method.
                     The cDNA libraries constructed by this method are
                     full-length enriched cDNA library."
BASE COUNT      127 a     83 c    141 g     53 t
ORIGIN

Alignment Scores:
Pred. No.:                0.246          Length:         404
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Best Local Similarity:    100.00%        Mismatches:     0
Query Match:              100.00%        Indels:         0
DB:                       14             Gaps:           0

US-09-856-070-23 (1-11) x BM744771 (1-404)

Qy       1 GluLeuMetLeuArgLeuGlnAspTyrGluGlu 11
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Search completed: January 16, 2003, 21:37:07
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